WHAT IS CLAIMED IS:

1. A method of detecting avian leukosis/sarcoma viruses at the nucleic acid level in an avian sample, comprising the steps of:

isolating viral RNA from said avian sample; and

performing RT-PCR.

2. The method of claim 1, wherein said avian sample is selected from the group consisting of unfertilized chicken egg albumen, fertilized chicken egg albumen, unfertilized egg albumen from an animal of the class *Aves* and fertilized egg albumen from an animal of the class *Aves*.

3. The method of claim 1, wherein said avian sample is blood from an animal of the class *Aves*.

4. The method of claim 1, wherein said avian sample is feather pulp from an animal of the class *Aves*..

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5. The method of claim 1, wherein said avian sample is a cell, tissue or body fluid from an animal of the class *Aves*..

10 6. A method of determining avian leukosis/sarcoma virus subgroup specificity at the nucleic acid level, including distinguishing between exogenous and endogenous retroviruses, comprising the steps of :

isolating viral RNA a specimen from an avian sample;

15 performing RT-PCR; and

sequencing the amplified RT-PCR product.

7. The method of claim 6, wherein said avian sample is selected from the group consisting of unfertilized chicken egg albumen, fertilized chicken egg albumen, unfertilized egg albumen from an animal of the class *Aves* and fertilized egg albumen from an animal of the class *Aves*.

8. The method of claim 6, wherein said avian sample is blood from an animal of the class *Aves*..

9. The method of claim 6, wherein said avian sample is feather pulp from an animal of the class *Aves*..

10. The method of claim 6, wherein said avian sample any cell or tissue or body fluid from an animal of the class *Aves*..

11. An oligonucleotide specific for the detection of viral subgroup A of avian leukosis/sarcoma virus at the nucleic acid level, said oligonucleotide having a sequence at least 95% identical to a sequence selected from the group consisting of:

(a) SEQ ID No: 7 and SEQ ID No: 8;

(b) a nucleotide sequence encoding the gp^{env} 85 protein; and

(c) an oligonucleotide which hybridizes under stringent hybridization conditions to a oligonucleotide defined by (a) or (b).

12. An oligonucleotide specific for the detection of viral subgroups A-E of avian leukosis/sarcoma virus at the nucleic acid level, said oligonucleotide having a sequence at least 95% identical to a sequence selected from the group consisting of:

a) SEQ ID No: 15 and SEQ ID No: 16;

b) a nucleotide sequence encoding the gp^{env} 85 protein; and

c) an oligonucleotide which hybridizes under stringent hybridization conditions to an oligonucleotide defined by (a) or (b).

13. A method of detecting avian leukosis/sarcoma viruses at the nucleic acid level in a poultry sample, comprising the steps of:

isolating viral RNA from said poultry sample; and

performing RT-PCR using an oligonucleotide of claim 11.

14. A method of detecting avian leukemia viruses at the nucleic acid level in a poultry sample, comprising the steps of:

isolating viral RNA from said poultry sample; and

performing RT-PCR using an oligonucleotide of claim 12.

15. A method of determining avian leukemia virus subgroup specificity at the nucleic acid level and distinguishing between exogenous and endogenous retroviruses, comprising the steps of :

obtaining a specimen from a poultry sample;

isolating viral RNA from said sample;

performing RT-PCR using an oligonucleotide of claim 11; and

sequencing the amplified RT-PCR product.

16. A method of determining avian leukosis/sarcoma virus subgroup specificity at the nucleic acid level and distinguishing between exogenous and endogenous retroviruses, comprising the steps of:

obtaining a specimen from a poultry sample;

isolating viral RNA from said sample;

performing RT-PCR using the primers of claim 12; and

sequencing the amplified RT-PCR product.